

**From:** [Sasso, Alan](#)  
**To:** [Malott, Vincent](#); [Gibbons, Catherine](#)  
**Cc:** [Rauscher, Jon](#)  
**Subject:** RE: inquiring about speciated chromium (Cr(VI) and Cr(III)) in soils  
**Date:** Tuesday, October 25, 2016 2:16:18 PM

---

Thank you Vincent,

If you could direct me to the reports, that would be great. I have been trying to navigate the internet and intranet sites in order to find data and reports, but my searches have mostly turned-up empty.

-Alan

---

**From:** Malott, Vincent  
**Sent:** Tuesday, October 25, 2016 3:12 PM  
**To:** Sasso, Alan <[Sasso.Alan@epa.gov](mailto:Sasso.Alan@epa.gov)>; Gibbons, Catherine <[Gibbons.Catherine@epa.gov](mailto:Gibbons.Catherine@epa.gov)>  
**Cc:** Rauscher, Jon <[Rauscher.Jon@epa.gov](mailto:Rauscher.Jon@epa.gov)>  
**Subject:** RE: inquiring about speciated chromium (Cr(VI) and Cr(III)) in soils

Alan,

I have a soil data set for the West County Road 112 Superfund site in Midland County, TX, which consists of a large hexavalent chromium plume. The soil data was collected using an incremental composite sampling methodology. Deana Crumbling provided assistance and direction on the SAP. The sampling data was collected to address whether hexavalent chromium is accumulating in the upper soil column from the use of contaminated ground water for irrigation at homes. The soil data is for the upper 2 feet of soil. There are multiple hex chrome Superfund sites in the Odessa, TX, area and additional data in the RI reports should be available as well if needed (traditional discrete sample data points).

Thanks,

Vincent Malott

Remedial Project Manager

EPA Region 6 - Superfund Division (GSF-RA)

214-665-8313

[malott.vincent@epa.gov](mailto:malott.vincent@epa.gov)

---

**From:** Turner, Philip  
**Sent:** Tuesday, October 25, 2016 1:38 PM  
**Subject:** FW: inquiring about speciated chromium (Cr(VI) and Cr(III)) in soils

---

**From:** Sasso, Alan  
**Sent:** Tuesday, October 25, 2016 11:59 AM  
**To:** OLEM OSRTI Human Health Risk Assessors <[OLEMOSRTIHumanHealthRiskAssessors@epa.gov](mailto:OLEMOSRTIHumanHealthRiskAssessors@epa.gov)>  
**Cc:** Gibbons, Catherine <[Gibbons.Catherine@epa.gov](mailto:Gibbons.Catherine@epa.gov)>  
**Subject:** inquiring about speciated chromium (Cr(VI) and Cr(III)) in soils

Hi Everyone,

Catherine Gibbons and I are co-chemical managers of the hexavalent chromium IRIS assessment. Part of our assessment will describe the environmental fate and transport of Cr(VI) in air/water/soil. To my knowledge, there currently is no nationwide survey of "background" Cr(VI) concentrations in soil. We have only been able to find data from USGS, which is for total chromium (a mean of 36 mg/kg for surface soil, ranging up to ~4000 mg/kg).

Are there any publicly-available EPA data for background speciated Cr(VI) in soils? We would like to

be able to cite a concentration range that is generally observed in the US, and have a published report or database to support it. Data that also includes Cr(III) concentrations, or the percentage of total chromium in soil that is Cr(VI), would also be useful.

Data for contaminated sites would also be helpful, since there is always debate regarding man-made versus naturally-occurring Cr(VI).

If you have any useful data that is public (or would be willing to make public), or if you know of where we might be able to access some of this data, please contact Catherine and I.

Thanks,

-Alan

---

Alan F. Sasso, Ph.D.  
Office of Research and Development  
National Center for Environmental Assessment  
U.S. Environmental Protection Agency  
(703)-347-0179

---